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**Letter of Transmittal**

Date: 28 April 1999  
File Number: 74167-001  
From: Sunila Gupta  
Joseph Savarese

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To: New Jersey Department of Environmental Protection  
BEECRA, P.O. Box 432  
401 East State Street, Trenton, NJ 08625

Attention: Mr. Joseph Nowak

Copy to: A. William Nosil  
Edward Hogan, Esq.

Subject: Hexcel Facility, Lodi, NJ

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Copies	Date	Description
3	4/27/99	Quarterly Progress Report

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**HALEY &  
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27 April 1999  
File No. 74167-001

New Jersey Department of Environmental Protection  
Bureau of Environmental Evaluation and Cleanup Responsibility Assessment  
P.O. Box 432  
401 East State Street  
Trenton, NJ 08625

Attention: Joseph J. Nowak

Subject: Quarterly Progress Report  
Hexcel Corporation  
Lodi Borough, Bergen County, New Jersey  
ISRA Case No. 86009

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), the following is the progress report of activities carried out during January, February, and March 1999. This quarterly report is prepared in accordance with the Industrial Site Recovery Act (ISRA) requirements for the Hexcel facility in Lodi, New Jersey.

During the first quarter of 1999, demolition activities were completed and groundwater elevation/DNAPL/LNAPL monitoring and product recovery programs resumed. Additionally, Hexcel is preparing to present its conceptual plan for a remedial strategy to the New Jersey Department of Environmental Protection (NJDEP) and a meeting date has been set for 20 May 1999.

The following topics are discussed in this progress report:

- 1) Groundwater Elevation/DNAPL/LNAPL Monitoring
  - a) Quarterly Monitoring
  - b) Monthly Monitoring
- 2) Product Recovery Program
  - a) DNAPL Recovery
  - b) LNAPL Recovery
- 3) Schedule and Cost Estimates

## 1. GROUNDWATER ELEVATION/DNAPL/LNAPL MONITORING

This section includes the results of quarterly monitoring performed during the first quarter of 1999. Quarterly and monthly monitoring is performed in accordance with the NJDEP-

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approved plan presented in our progress report dated 24 October 1994. There was a temporary change in the monitoring program in the first quarter of 1999 as communicated in our letter dated 19 January 1999 to you. As conveyed in the January 1999 letter, the groundwater/DNAPL/LNAPL monitoring program ceased during the demolition activities at the site. The quarterly monitoring, typically scheduled for the month of January during the first quarter, was performed on 17 February 1999 following the completion of the demolition activities.

#### **1a. Quarterly Monitoring**

Hexcel conducted quarterly groundwater elevation, DNAPL and LNAPL monitoring on 17 February 1999, in accordance with the monitoring plan. Results of the quarterly monitoring are tabulated in Table I. Figures 1 and 2 illustrate shallow and deep groundwater elevation contours, respectively. Contour Map Reporting Forms are included for each of the contour maps. Table II contains a summary of well construction data to accompany the Contour Map Reporting Form for Figure 1. Tables I and II, Figures 1 and 2 and the contour map reporting forms are included as Appendix A.

#### **1b. Monthly Monitoring**

In addition to the quarterly monitoring conducted in February, Hexcel conducted monthly DNAPL and LNAPL monitoring on 2 March 1999 in accordance with the monitoring plan and modifications approved by the NJDEP in its 12 June 1995 letter. As stated above, monitoring could not be conducted in the month of January due to demolition activities. Results for the March monthly monitoring are provided in Table III located in Appendix B.

Several modifications were made to the monthly monitoring plan in the first quarter of 1999. MW-17 and MW-26 were added to the monthly monitoring program subsequent to the detection of LNAPL and DNAPL respectively, on the product interface-probe during the quarterly monitoring event in February. Additionally, monitoring of the wells points PB-1 and PB-2 in the basement pit ceased due to safety concerns. Specifically, the basement pit was secured with steel plates prior to the commencement of demolition activities for safety reasons and to prevent debris from falling into the pit. Following demolition, the pit has been left enclosed to prevent unauthorized access.

Hexcel will continue to perform monthly monitoring in accordance with the approved plan. Hexcel will report any modification to the monthly monitoring, by the addition and deletion of wells, in the progress reports.

### **2. PRODUCT RECOVERY PROGRAM**

This section includes results for the temporary product recovery program currently being implemented at the site. For the purposes of product collection, quantities less than 0.1 gallon (approximately 1 cup) are considered to be non-recoverable. Based on our experience, if the product interface meter does not signal the presence of product, then it is not possible to pump a significant amount of DNAPL from the well, even when DNAPL is observed on the

Joseph J. Nowak  
27 April 1999  
Page 3 of 4

probe. Therefore, DNAPL recovery is usually attempted only when there is a signal from the product interface meter indicating the presence of product. Hexcel will continue to monitor for recoverable amounts of product (LNAPL and DNAPL) using the interface probe, as approved in the NJDEP's 27 May 1998 letter.

## **2a. DNAPL Recovery**

During the first quarter of 1999, DNAPL recovery was performed at monitoring well MW-6 and MW-26 in the month of March following completion of building demolition. Approximately 0.1 gallons of DNAPL was recovered from both MW-6 and MW-26. No other wells indicated presence of recoverable amounts of DNAPL. DNAPL recovery during this quarter is summarized in Table IV, located in Appendix C.

## **2b. LNAPL Recovery**


No recoverable LNAPL was detected during the first quarter of 1999. Absorbent pads were installed in MW-6 and MW-17 after indication of presence of trace amounts of LNAPL, but measurable amount was not recovered. LNAPL recovery efforts are summarized in Table V (Appendix C).

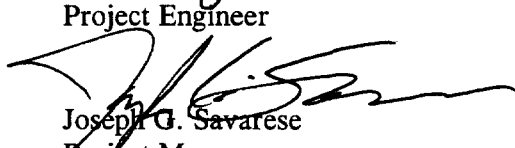
## **3. SCHEDULE AND COST ESTIMATES**

Table VI, located in Appendix D, presents an updated estimate of the schedule of the remedial activities planned for 1999. Cost estimates will be included within the Remedial Action Workplan (RAW) which we anticipate submitting shortly after our meeting with the NJDEP in May.

Please call us if you have any questions regarding the above.

Sincerely yours,  
HALEY & ALDRICH, INC.

  
Sunila Gupta  
Project Engineer

  
Joseph G. Savarese  
Project Manager

Enclosures

c: A. William Nosil  
Edward Hogan, Esq.



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## **Appendix D**

### **Schedule Estimates**

**Table VII: Estimated Schedule of Remedial Activities in 1999**

**TABLE VII**  
**ESTIMATED SCHEDULE OF REMEDIAL ACTIVITIES IN 1999**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

TASK DESCRIPTION	1999											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>REMEDATION</b>												
DNAPL/LNAPL recovery (temporary)												
Demolish bldgs & dispose debris & waste												
Delineation of Surface PCBs												
Excavation of Surface PCBs												
Collect, analyze & evaluate surface water samples												
Permitting associated with the Remedial Plan												
Commence Implementation of Remedial Plan												
<b>REPORTING</b>												
Meet with NJDEP to propose conceptual Remedial Plan												
Prepare comprehensive remedial plan (RAW Addendum)												
NJDEP review of remedial plan												
Progress Report/Remedial Status Report												
Prepare final report *												
NJDEP review and site inspection *												
Case closure *												

\* Timing to be estimated within comprehensive remedial plan.

## **Appendix A**

### **Quarterly Monitoring**

**Table I: Quarterly Water Level/Product Thickness Measurements (2/17/99)**

**Table II: Well Construction Data**

**Contour Map Reporting Form for Figure 1**

**Figure 1: Shallow Groundwater Elevation Contours on 2/17/99**

**Contour Map Reporting Form for Figure 2**

**Figure 2: Deep Groundwater Elevation Contours on 2/17/99**

## Contour Map Reporting Form

Site Name: Hexcel Facility, Lodi, NJ  
File No.: 74167-004

Figure No.: 1  
Water levels taken on 2/17/99  
Page 1 of 2

1. Did any surveyed well casing elevations change from the previous sampling event? ☒ Yes  
If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☐ No

*The casing for RW6-2 had to be cut at the top because it was damaged during demolition activities. The well was not damaged. The top of casing elevation will be resurveyed shortly.*

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? If yes, identify these wells. ☒ Yes  
☐ No

*Monitor wells for which the water table elevations are higher than the top of the well screen are identified in Table II: Well Construction Data provided in Appendix A.*

3. Are there any monitor wells present at the site but omitted from the contour map? ☒ Yes  
Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☐ No

*The quarterly ground water elevation monitoring plan was approved by NJDEP in its June 12, 1995 letter. For information on additional omissions, please refer to Figure 1: Shallow Groundwater Elevation Contours on 2/17/99 and Table I: Quarterly Water Level/Product Thickness Measurements (2/17/99) in Appendix A.*

4. Are there any monitor wells containing separate phase product during this measuring event? ☒ Yes  
☐ No

*MW-6 and MW-26 indicated presence of measurable DNAPL and MW-17 indicated presence of measurable LNAPL with the product-interface probe during the February 1999 quarterly monitoring event. For some other wells, although the product-interface probe did not register presence of product, visual observation of the probe indicated presence of product (DNAPL).*

Were any of the monitor wells with separate phase product included in the ground water contour map? ☒ Yes  
☐ No  
If yes, show the formula used to correct the water table elevation.

*Water level in MW-17 was corrected using the equation:*



## Contour Map Reporting Form

**Site Name:** Hexcel Facility, Lodi, NJ  
**File No.:** 74167-004

**Figure No.:** 1  
**Water levels taken on** 2/17/99  
**Page 2 of 2**

*Depth to Water (Corrected) = DTW (measured) - (Product Thickness  
X Specific Gravity) where product thickness refers to the thickness of LNAPL layer.  
A specific gravity of 0.88 was used for calculation.  
No correction is required for water level due to the presence of DNAPL.*

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐ Yes ☒ No  
If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☒ Yes ☐ No  
Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

*It is not known why mounding occurs in the vicinity of building 2.*

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒ Yes ☐ No  
If no, justify inclusion of those wells.

8. Were the ground water contours  
☒ computer generated, ☐ computer aided, or ☐ hand-drawn?  
If computer aided or generated, identify the interpolation method(s) used.

*Kriging Routine*

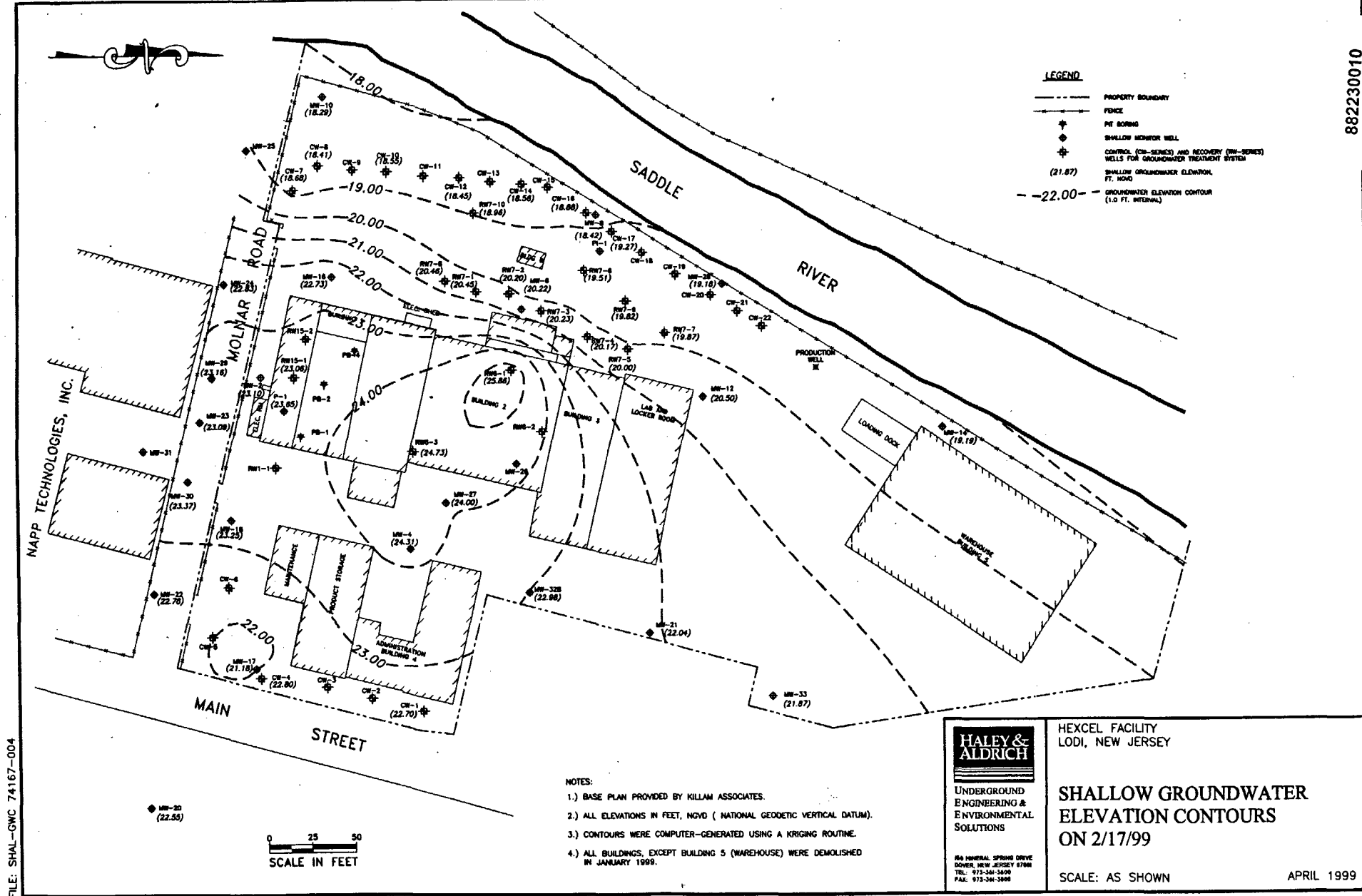


FIGURE 1

## Contour Map Reporting Form

**Site Name:** Hexcel Facility, Lodi, NJ  
**File No.:** 74167-004

**Figure No.:** 2  
**Water levels taken on** 2/17/99  
**Page 1 of 1**

1. Did any surveyed well casing elevations change from the previous sampling event? ☐ Yes  
If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒ No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? If yes, identify these wells. ☐ Yes  
☒ No

*Not applicable because confined aquifer.*

3. Are there any monitor wells present at the site but omitted from the contour map? ☐ Yes  
Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☒ No

4. Are there any monitor wells containing separate phase product during this measuring event? ☐ Yes  
☒ No

Were any of the monitor wells with separate phase product included in the ground water contour map? ☐ Yes  
☒ No

If yes, show the formula used to correct the water table elevation.

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐ Yes  
☒ No  
If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☐ Yes  
☒ No  
Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒ Yes  
If no, justify inclusion of those wells. ☐ No

8. Were the ground water contours  
☒ computer generated, ☐ computer aided, or ☐ hand-drawn?  
If computer aided or generated, identify the interpolation method(s) used.

*Kriging Routine*

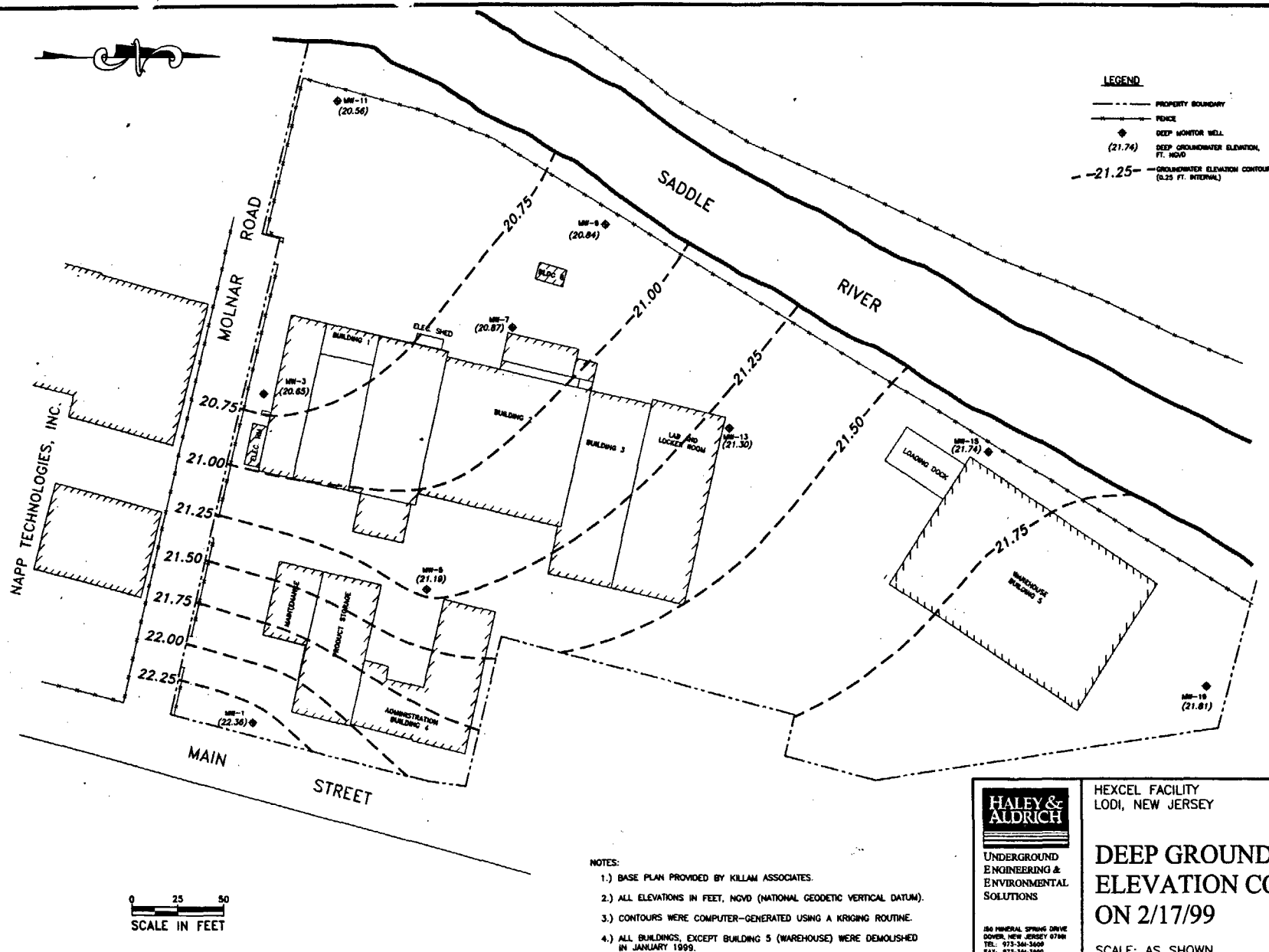


FIGURE 2

**Appendix B**

**Monthly Monitoring**

**Table III: Monthly Water Level/Product Thickness Measurements for March 1999**

Monitoring could not be conducted in January 1999 due to demolition activities. Therefore, quarterly monitoring was conducted in February during the first quarter of 1999 (refer to Appendix A for quarterly monitoring data). The monthly monitoring was performed in March (refer to attached Table III).

**TABLE III**  
**MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS FOR MARCH 1999**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -

-All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 3/2/99

Well ID	Type	Depth to Water	Depth to Product		Product Thickness		Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL	DNAPL	LNAPL				
CW-7	shallow	7.19	--	--	--	--	14.05	26.13	18.94	
CW-12	shallow	7.00	--	--	--	--	16.01	25.71	18.71	Product on Probe (DNAPL)**.
CW-16	shallow	7.22	--	--	--	--	13.95	26.45	19.23	Product on Probe (DNAPL)**.
MW-6	shallow	10.10	17.94	10.09	0.42	0.05	18.36	30.74	20.64	Measured depth to water was 10.14'. Product on Probe (DNAPL and LNAPL).
MW-8	shallow	11.32	--	--	--	--	17.39	30.26	18.94	
MW-17	shallow	9.31	--	--	--	--	14.15	31.44	22.13	
MW-26		6.93	--	--	--	--	17.97	28.85	21.92	
RW6-1	shallow	2.44	--	--	--	--	13.61	28.84	26.40	
RW7-1	shallow	5.95	--	--	--	--	15.64	26.25	20.30	
RW7-4	shallow	6.76	--	--	--	--	19.04	27.11	20.35	
RW7-5	shallow	7.36	--	--	--	--	10.12	27.57	20.21	

**NOTES:**

All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

--: Not detected by product interface meter.

\*: In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness \* specific gravity).

Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

\*\*: Though the product-interface meter did not register presence of product in the well, product was observed on the probe.

## **Appendix C**

### **Product Recovery**


**Table IV: Product Collection (DNAPL) in First Quarter of 1999**

**Table V: Product Collection (LNAPL) in First Quarter of 1999**



**TABLE IV**  
**PRODUCT COLLECTION (DNAPL) IN FIRST QUARTER OF 1999**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

*All Quantities are Expressed in Gallons Rounded to the Nearest 0.1*

DATE	MW-6 (DNAPL)	MW-8 (DNAPL)	MW-26 (DNAPL)	RW6-1 (DNAPL)	RW7-1 (DNAPL)	RW7-4 (DNAPL)	RW7-5 (DNAPL)	CW-12 (DNAPL)	CW-16 (DNAPL)	PB-2 (DNAPL)	TOTAL VOLUME RECOVERED**
Product recovery efforts were temporarily ceased while demolition activities were being conducted. The weekly recover efforts were resumed following the quarterly monitoring on 2/17/99 and monthly monitoring on 3/2/99.											
3/12/99	0.1	*	--	*	*	*	*	*	*	Well point not accessible for monitoring and product recovery activities.	
3/19/99	--	*	0.1	*	*	*	*	*	*		
3/26/99	--	*	--	*	*	*	*	*	*		
3/31/99	--	*	--	*	*	*	*	*	*		
TOTAL VOLUME RECOVERED, 1st QUARTER, 1999	0.1	--	0.1	--	--	--	--	--	--	--	0.2
TOTAL VOLUME RECOVERED, 4th QUARTER 1998	0.2	--	--	--	--	--	--	--	--	--	0.2
TOTAL VOLUME RECOVERED**, 10/94 - 9/98	20.2	1.0	0.4	0.1	0.3	--	--	0.7	0.7	4.6	28.8
TOTAL VOLUME RECOVERED** (TOTAL SINCE 10/94)	20.5	1.0	0.5	0.1	0.3	--	--	0.7	0.7	4.6	29.2

**Notes:** For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

\*: Well not included in the weekly product recovery program.


--: i) Well was monitored and did not indicate recoverable product or ii) no measurable amount of product was recovered either by bailing or pumping.

\*\* : Total includes 0.8 gallons recovered from CW-15 prior to reinstallation of ground water recovery equipment in the well; the well was discontinued from the monitoring program at that time.

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**TABLE V**  
**PRODUCT COLLECTION (LNAPL) IN FIRST QUARTER OF 1999**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

*All Quantities are Expressed in Gallons Rounded to the Nearest 0.1*

DATE	MW-6 (LNAPL)	MW-8 (LNAPL)	MW-23 (LNAPL)	RW1-1 (LNAPL)	RW 6-1 (LNAPL)	RW7-4 (LNAPL)	RW7-5 (LNAPL)	CW-7 (LNAPL)	CW-12 (LNAPL)	CW-16 (LNAPL)	MW-17 (LNAPL)	RW 15-1 (LNAPL)	TOTAL VOLUME RECOVERED
1/7/99	*	*	*	*	*	*	*	--	*	*	*	*	
Product recovery efforts were temporarily ceased while demolition activities were being conducted. The weekly recover efforts were resumed following the quarterly monitoring on 2/17/99 and monthly monitoring on 3/2/99.													
3/2/99 (Monthly)	--	--	*	*	--	--	--	--	--	--	--	*	
3/12/99	--	*	*	*	*	*	*	*	*	*	--	*	
3/19/99	--	*	*	*	*	*	*	*	*	*	--	*	
3/26/99	--	*	*	*	*	*	*	*	*	*	*	*	
3/31/99	--	*	*	*	*	*	*	*	*	*	*	*	
TOTAL VOLUME RECOVERED, 1st QUARTER, 1999	--	--	--	--	--	--	--	--	--	--	--	--	0.0
TOTAL VOLUME RECOVERED, 4th QUARTER 1998	1.1	--	--	--	--	--	--	0.8	--	--	--	--	1.9
TOTAL VOLUME RECOVERED, 10/94 - 9/98	6.9	--	--	--	--	--	--	2.6	--	--	--	--	9.5
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	8.0	--	--	--	--	--	--	3.4	--	--	--	--	11.4

**Notes:** For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

\* Well not included in the weekly product recovery.

-- i) Monitoring did not indicate recoverable product or ii) no measurable amount of LNAPL was recovered in the absorbent pad.

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## **Appendix D**

### **Schedule Estimates**

#### **Table VI: Estimated Schedule of Remaining Remedial Activities**

**TABLE VIII**  
**ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

Page 1 of 1

TASK DESCRIPTION	1999											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>REMEDATION</b>												
DNAPL/LNAPL recovery (temporary)												
Demolish bldgs & dispose debris & waste												
Excavation of Surface PCBs												
Collect, analyze & evaluate surface water samples												
Permitting associated with the remedial plan												
Implement remedial plan												
<b>REPORTING</b>												
Meet with NJDEP to propose remedial plan												
Prepare comprehensive remedial plan (RAW Addendum)												
NJDEP review of remedial plan												
Progress Report/Remedial Status Report												
Prepare final report *												
NJDEP review and site inspection *												
Case closure *												

\* Timing to be estimated within comprehensive remedial plan.